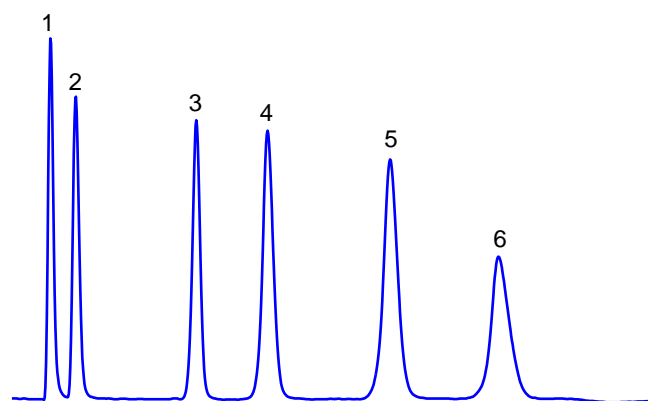
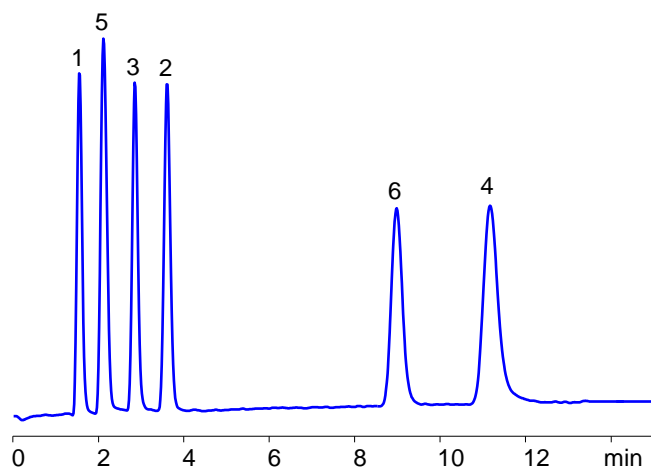


Analysis of Underivatized Amino Acids and Amines in RP/Cation-Exchange and HILIC/Cation-Exchange Modes



1. Chloride ion
2. Citrulline
3. 4-Aminobutyric acid (GABA)
4. Ornithine
5. Dopamine
6. Arginine

Column: Amaze SC
Dimensions: 3.0 x 100 mm, 5 μ m, 100A
Mobile phase: 10% ACN with 20 mM AmFm pH 3
Flow rate: 0.6 ml/min
Detection: Corona CAD



Column: Amaze HD
Dimensions: 3.0 x 100 mm, 3 μ m, 100A
Mobile phase: 72% ACN with 56 mM AmFm pH 3
Flow rate: 0.6 ml/min
Detection: Corona CAD

Application Notes

Amino acids and amines are two important groups of compounds which are frequently analyzed as supplements, drugs and as building blocks in organic chemistry. At HELIX, we have all the tools you need to develop robust methods that are compatible with mass spectrometry and prep chromatography. Amino acids and amines can be retained and analyzed by the reversed-phase cation-exchange mechanism or by HILIC/cation-exchange mechanisms. Adding the second dimension to your interaction helps you achieve the desired resolution order of elution for various compounds. The presence of ionizable groups on the surface of silica gel allows to use these columns with any buffer, including mass spectrometry. Retention time and selectivity of separation can be adjusted with the amount of ACCN, buffer concentration and buffer pH. Mixed-mode HPLC columns are a perfect choice for tough separation where unique selectivity of mixed-mode can provide a much better resolution and efficiency than traditional single mode chromatography. Visit www.helixchrom.com to learn what we know.